

Work Order ID 62761

Page 1

Thursday, October 07, 2010 3:12:10 PM

Item ID: D206-642-541

Accept



Setup Start



Revision ID:

Item Name: Replacement Skidtube

Stop



Start Date: 10/7/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 10/15/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:



Date: 10/10/07

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| Draw Nbr | Revision Nbr | | | | | | | | |
| D3274 | D | | | | | | | | |
| IIN-D206-642 | Rev M | | | | | | | | |
| 100 | | 0.00 | | | | | | | |



DOCUMENT CONTROL

DC

Document Control

Memo

0.00

Photocopy bluefile & type labels per PPP D206-642-541

CHG003



| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Work Order ID 62761

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Item ID: D206-642-541

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Required Date: 10/15/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

110

Operation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Skidtubes

Skidtubes

0.00

Skidtubes

Memo

0.00

*****VERIFY AND INSPECT THE MATERIAL PRIOR TO USE****

1- Bend FWD end of tube using bend prog D3274 FWD and foilo 10 as per dwg D3274, cut fwd end of tube with saw table setup D3274.

2- remove fwd indexing ridge as per dwg D3274. Prepare for welding

3- weld fwd cap as per dwg D3274 and QSI004

AR Aluminum Rod Batch: m11385/m115778

4- grind fwd cap weld on top surface only

BE 10-10-14

5- Cut AFT end of tube at 170.9" as per dwg D3274 and deburr end.

6-Drill Aft cap pilot hole using DT8025

7 -Cleco DT8025 in position and install pilot hole drill Jig DT8742A,B,C,D:
Drill 3/16" pilot holes as per Dwg D3274

8 -Remove inner indexing ridge on aft end of skidtube as per Dwg D3274 scribe batch #

9 -Open aft end cap holes to Ø0.208" as per Dwg D3274. Deburr aft end.

DP BB
BB

10-10-13

10-10-14

BE 10-10-14

DP
BB

10-10-18

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 62761

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Item ID: D206-642-541

Revision ID:

Item Name: Replacement Skidtube

Start Date: 10/7/2010 Start Qty: 1.00

Required Date: 10/15/2010 Req'd Qty: 1.00

Reference:

| | | | | | | | |
|------------|---------------|-------|------------|-------|------|-------|--|
| Approvals: | Process Plan: | Date: | Tooling: | Date: | Run | Start | |
| | QC: | Date: | SPC (Y/N): | Date: | Stop | | |

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

120 Chemical Conversion Coat per QSI005 4.1



HandFinish

Hand Finishing

130



QC

Quality Control

QC3- Inspect Part Finish

0.00

Memo

0.00

X1

BB 10/10/19

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

1

J 10/10/20

J 10/10/20

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 62761

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Item ID: D206-642-541

Revision ID:

Item Name: Replacement Skidtube

Start Date: 10/7/2010 Start Qty: 1.00

Required Date: 10/15/2010 Req'd Qty: 1.00

Reference:

| | | | | | | | |
|------------|---------------|-------|------------|-------|-----|-------|--|
| Approvals: | Process Plan: | Date: | Tooling: | Date: | Run | Start | |
| | QC: | Date: | SPC (Y/N): | Date: | | Stop | |

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 150 | Skidtubes | 0.00 | | | | | | | |
| Skidtubes | Memo | 0.00 | | | | | | | |
| Skidtubes | 1-Open 0.0.313" and 0.375" crossbolt spacer holes using DT8743 as per Dwg D3274 | | | | | | | | |
| | 2-Deburr crossbolt spacer holes as per Dwg D3274 and blow out chips from inside the tube | | | | | | | | |
| | 3-Bond web in place as per Dwg D3274 & QSI 015. | | | | | | | | |
| | A/R <input type="checkbox"/> Sikaflex-291 <input checked="" type="checkbox"/> <i>10/10/10</i> <input type="checkbox"/> | | | | | | | | |
| | Sikaflex expire date: <input type="checkbox"/> <i>01/2011</i> <input type="checkbox"/> | | | | | | | | |
| | Start: <input type="checkbox"/> <i>10/10/10</i> <input type="checkbox"/> Time: <i>1:30</i> <input type="checkbox"/> | | | | | | | | |
| | Finish: <input type="checkbox"/> <i>10/10/10</i> <input type="checkbox"/> Time: <i>8:25 AM</i> <input type="checkbox"/> | | | | | | | | |
| | (Adhere for 12 hours) | | | | | | | | |

DP 10-10-21

BE10/10/28

160



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

8/10/10

40

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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NOTE: Date & initial all entries

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Item ID: D206-642-541

Revision ID:

Item Name: Replacement Skidtube

Start Date: 10/7/2010 Start Qty: 1.00

Accept



Setup Start



Stop



Required Date: 10/15/2010 Req'd Qty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

170



Skidtubes

0.00

1

0

3E10/11/02

Skidtubes

Memo

0.00

1-Bend AFT end of tube using bend prog. D3274 AFT as per dwg D3274. Install drop pins in crossbolt spacer holes to maintain web position.

2- DRILL PILOT HOLES FOR WEARPLATES USING D3274-1T2
OPEN HOLES TO .297". Deburr3-DRILL TOE PIN HOLE .640" DIA AS PER DWG USING DT8935 FWD
END OF TUBEDEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES)
REMOVE ANY FOREIGN OBJECTS INSIDE OF TUBES

4- Countersink crossbolt spacer holes as per Dwg D3274

5- prepare for welding

180



QC5- Inspect part completeness to step on W/O

0.00

h = 3.180

QC

Quality Control

Memo

0.00

L° = 5.2°

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| 10/11/02 | # 170.1 | Found at inspection HPT end of tube S over bent. reading 3.160" should be 3.00". Angle is 5.2 should be 4.5 | CP 10.11.02 pw 081042 | OK. Higher bend causes less moment from increased drag vs float moment | BE 10/11/02 S 10/11/02 | S 10/11/02 | CP 10.11.02 QSI 042 | S 10/11/02 |
| | | R.C. Process | | | | | | S 10/11/02 |
| | | | | | | | | |

NOTE: Date & initial all entries

Work Order ID 62761

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Item ID: D206-642-541

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Setup Start



Revision ID:

Item Name: Replacement Skidtube

Stop



Start Date: 10/7/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 10/15/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

190

Operation
Description

Skidtubes

Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Skidtubes

Skidtubes

Memo

0.00

1-Insert D2649 & D3275-1 crossbolt spacers. Weld as per QSI 004 and Dwg D3274. Remember to back drill each hole before welding the other side. Use aluminum rod

A/R Aluminum Rod m111385

3-Grind cross bolt welds flush as per Dwg D3274.

4-Counterbore 5/16" x 0.750" deep as per Dwg D3274 and deburr.

200



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

S polyloc
80

| W/O: | | WORK ORDER CHANGES | | | | | | | |
|------|------|--------------------|--|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | | | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Work Order ID 62761

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Thursday, October 07, 2010 3:12:10 PM

Item ID: D206-642-541

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Setup Start



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Item Name: Replacement Skidtube

Stop



Start Date: 10/7/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 10/15/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

210



QC

Quality Control

Operation
Description

QC10- Inspect visual per QSI004- ground welds

Set Up/
Run Hours

0.00

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

220



HandFinish

Hand Finishing

Pressure Wash per QSI005 4.3

0.00

0.00

230



Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

0.00

Memo

START TIME: 8:50
 OVEN TEMPERATURE: 300°
 FINISH TIME: 9:20

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Work Order ID 62761

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Item ID: D206-642-541

Accept



Setup Start



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Stop



Start Date: 10/7/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 10/15/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

240



QC

Quality Control

Operation
Description

QC3- Inspect Part Finish

Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

250



HandFinish

Hand Finishing

HandFinishing

0.00

0.00

=> M 10/11/04

1

✓

260



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

0.00

S. dubat

(40)

Memo
Inspect Nut Plate & Inserts1-Install Nut Plate as per Dwg D3274. Apply LPS-3 to Nut Plate and rivets.
A/R□□A/LPS-3□ M1099562-Install inserts as per Dwg D3274. Use a drop of Sikaflex inside insert holes a
A/R□□Sikaflex-291 □ M115146
Sikaflex expire date: □ 11/01

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Work Order ID 62761

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Setup Start



Required Date: 10/15/2010 Req'd Qty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____

QC: _____ Date: _____

Tooling: _____ Date: _____

SPC (Y/N): _____ Date: _____

Run Start



Stop

Sequence ID/
Work Center ID
270

HandFinish

Hand Finishing

Operation
Description
HAND FINISHING RESOURCE #1Set Up/
Run Hours
0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

→ 10/11/04

1 0

Memo

0.00

✓ 1-Install wearpads & gaskets as per Dwg D3274.

2-Install ring as per Dwg D3274

A/R Sikaflex-291 10/15/14
Sikaflex expire date: 10/01

✓ 3-Inspect for foreign objects as per QSI 024

✓ 4-Spray inside of tube on both sides of web with LPS-3
A/R LPS-3 Batch: N/A

5-Install Aft Cap and seal with Sikaflex. Clean excess adhesive.

✓ A/R Sikaflex-291 10/15/14
Sikaflex expire date: 10/01

280



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

S 10/11/05

X

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Stop



Required Date: 10/15/2010 Req'd Qty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

QC: _____

Date: _____

Tooling: _____

Date: _____

SPC (Y/N): _____

Run Start



Stop

Sequence ID/
Work Center ID

290



Packaging

Operation
Description

Identify as per dwg & Stock Location: _____

Set Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

0.00

300



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

| W/O: | | WORK ORDER CHANGES | | | | | | | |
|------|------|--------------------|--|--|----|------|-----|-------------------------------------|--------------------------|
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NOTE: Date & initial all entries

Picklist Print

Thursday, October 07, 2010 3:12:14 PM

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Work Order ID: 62761



Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 10/7/2010

Required Date: 10/15/2010

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev:B 05.09.23 Revised per D206-642 Rev. J KJ/JLM
IPP Rev:C 07-02-23 Added SS Wearplates & Gaskets JLM
IPP Rev:D 07-12-06 replace NAS1515H3L to D3672-1 DD
IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC
IPP Rev:F 08-06-02 add comment DD verified by:EC
IPP Rev:G 08-10-09 revise details DD verified by:EC

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D2600-1-190 | | Manufactured | No | | | 110 | Each | 73.0000 | 1 | 1 | | | |

Extrusion Round 3" 206

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| LG | 73 | |
| | 25 | |
| 47575 | | |
| 59874 | 48 | |

10-10-13

D3285-1



Manufactured No

110 Each 141.0000



Cap

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| LG | 141 | |
| 52511 | 74 | |
| 52647 | 67 | |

8E10-10-14

D3282-041



Manufactured No

150 Each 2.0000



Float Web (206L/407)

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| LG | 2 | |
| 59886 | 2 | |

8E10/10/28

B 62947

A

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Picklist Print

Page 2

Thursday, October 07, 2010 3:12:14 PM

Work Order ID: 62761



Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 10/7/2010

Required Date: 10/15/2010

D2649



Manufactured No

190

Each

65.0000

1

1

Cross Bolt Spacer

B62889 12 BE10/11/03

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| LG | 65 | |
| 58545 | 2 | |
| 60652 | 4 | |
| 61496 | 59 | |

D3275-1



Manufactured No

190

Each

216.0000

12

12

Crossbolt Spacer

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| LG | 216 | |
| 53453 | 8 | |
| 61646 | 102 | |
| 62399 | 106 | |

CR3212-4-03



Purchased No

250

Each

1,888.000

2

12 10/11/03

Cherry Rivet

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| ST311 | 1888 | |
| 111359 | 5 | |
| 112314 | 2 | |
| 114436 | 448 | |
| 114450 | 71 | |
| 114859 | 1362 | |

D3415-041



Manufactured No

250

Each

52.0000

1

12 10/11/04

Nut Plate

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| ST056 | 52 | |
| 33842 | 52 | |

X1

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Picklist Print

Thursday, October 07, 2010 3:12:14 PM

Page 3

Work Order ID: 62761



Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 10/7/2010

Required Date: 10/15/2010

Start Qty: 1.00

Required Qty: 1.00

CCR264SS3-3



Purchased

No

250

Each

446.0000

2

2



M

10/11/04

Cherry Rivet

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| ST311 | 446 | |
| 112314 | 4 | |
| 113539 | 44 | |
| 113973 | 398 | X2 |

ALS4-1032-130



Purchased

No

250

Each

1,147.000

78

78



M

10/11/04

Insert

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| PKG11 | 1098 | |
| 114723 | 1098 | M115&11 |
| ST282 | 10 | Y78 |
| 110511 | 10 | |
| ST381 | 39 | |
| 114654 | 39 | |

D3536-15



Manufactured

No

270

Each

21.0000

1



M

10/11/04

Gasket

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| FP | 9 | |
| 56055 | 1 | |
| 60875 | 8 | |
| FP11 | 12 | |
| 59238 | 1 | |
| 62459 | 11 | X\ |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Picklist Print

Page 4

Thursday, October 07, 2010 3:12:14 PM

Work Order ID: 62761



Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 10/7/2010

Required Date: 10/15/2010

Start Qty: 1.00

Required Qty: 1.00

D3536-23



Manufactured No

270

Each

8.0000



1



1

M 10/11/04

Gasket

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| FP011 | 8 | B6B91 |
| 61237 | 8 | |

D3536-35



Manufactured No

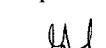
270

Each

23.0000



1



1

M 10/11/04

Gasket

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| FP012 | 23 | |
| 58683 | 1 | |
| 61692 | 10 | |
| 62462 | 12 | |

D3536-39



Manufactured No

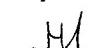
270

Each

12.0000



1



1

M 10/11/04

Gasket

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| FP12 | 12 | |
| 58215 | 1 | |
| 5857L | 11 | |

D3535-15



Manufactured No

270

Each

12.0000



1



1

M 10/11/04

Wearshoe

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| FP18 | 12 | |
| 61241 | 6 | |
| 62241 | 6 | |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|----------------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Picklist Print

Page 5

Thursday, October 07, 2010 3:12:14 PM

Work Order ID: 62761



Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 10/7/2010

Required Date: 10/15/2010

Start Qty: 1.00

Required Qty: 1.00

D3535-35



Manufactured No

270

Each

8.0000

1

1



M1 1011104

Wearshoe

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| FP018 | 8 | |
| | 8 | |

D3535-39



Manufactured No

270

Each

17.0000

1

1



M1 1011104

Wearshoe

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| FP18 | 17 | |
| | 1 | |
| | 16 | |

D3535-23



Manufactured No

270

Each

19.0000

1

1



M1 1011104

Wearshoe

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| FP | 7 | |
| | 7 | |
| FP021 | 20 | |
| | 11 | |

D3537-3



Manufactured No

270

Each

6.0000

1

1



M1 1011104

Wearpad

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| FP17 | 6 | |
| | 6 | |

| W/O: | | WORK ORDER CHANGES | | | | | | | |
|------|------|--------------------|--|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | | | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | | |
| | | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Picklist Print

Page 6

Thursday, October 07, 2010 3:12:14 PM

Work Order ID: 62761



Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 10/7/2010

Required Date: 10/15/2010

Start Qty: 1.00

Required Qty: 1.00

D3537-I



Manufactured No

270

Each

14.0000

9

9



JL 101104

Wearpad

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
|-----------------|----------------|-----------------|

| | | |
|-------|---|---------|
| FP | 1 | |
| 55465 | 1 | |
| FP017 | 6 | |
| 61986 | 6 | |
| FP17 | 7 | 1362661 |
| 57713 | 3 | |
| 60491 | 3 | |
| 61640 | 1 | |

AN960C10L



NAS1149C0332

R

Purchased

No

270

Each

29.0000

80

80

AA 115832



X80 JL 101104

washer

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
|-----------------|----------------|-----------------|

| | | |
|--------|----|--|
| ST245 | 29 | |
| 107534 | 29 | |

AN960C416



NAS1149C0463

R

Purchased

No

270

Each

100.0000

1

1

washer

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
|-----------------|----------------|-----------------|

| | | |
|--------|-----|--|
| ST346 | 100 | |
| 100993 | 100 | |

M 115358



JL 101104

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
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NOTE: Date & initial all entries

Picklist Print

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Thursday, October 07, 2010 3:12:14 PM

Work Order ID: 62761



Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 10/7/2010

Required Date: 10/15/2010

Start Qty: 1.00

Required Qty: 1.00

D3672-1



Manufactured No

270

Each

855.0000

2

2



JL 1011104

Phenolic Washer

| | <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|--|-----------------|----------------|-----------------|
| | ST077 | 855 | |
| | 42329 | 150 | |
| | <u>52505</u> | 705 | |

AN3C4A



Purchased No

270

Each

1,650.0000

80

80



JL 1014104

BOLT

| | <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|--|-----------------|----------------|-----------------|
| | ST245 | 20 | |
| | 110139 | 20 | |
| | ST303 | 42 | |
| | 115438 | 42 | |
| | ST350 | 1588 | |
| | 114108 | 14 | |
| | 114416 | 12 | |
| | 114523 | 2 | |
| | 115300 | 560 | |
| | <u>115589</u> | 1000 | |

AN4C5A



Purchased No

270

Each

489.0000

1

1



JL 1011104

BOLT

| | <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|--|-----------------|----------------|-----------------|
| | ST346 | 489 | |
| | 110552 | 4 | |
| | <u>112243</u> | 485 | |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Picklist Print

Thursday, October 07, 2010 3:12:14 PM

Page 8

Work Order ID: 62761



Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 10/7/2010

Required Date: 10/15/2010

Start Qty: 1.00

Required Qty: 1.00

D2646



Manufactured No

270

Each

44.0000

1

1

Aft Cap

M volu 104

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
|-----------------|----------------|-----------------|

| | | |
|------|----|--|
| FP-4 | 39 | |
|------|----|--|

57332

39

x1

| | | |
|-----|---|--|
| fp5 | 1 | |
|-----|---|--|

61752

1

| | | |
|-----|---|--|
| FP6 | 4 | |
|-----|---|--|

52663

4

D3413-1



Manufactured No

270

Each

31.0000

1

1

Ring

M volu 104

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
|-----------------|----------------|-----------------|

| | | |
|-------|----|--|
| ST473 | 31 | |
|-------|----|--|

51586

31

| | | |
|-------|----|--|
| 53446 | 15 | |
|-------|----|--|

61322

15

x1

| W/O: | | WORK ORDER CHANGES | | | | | | | |
|------|------|--------------------|--|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | | | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | | |
| | | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
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NOTE: Date & initial all entries

DART

| | | | |
|---------------------|-----------------------|--|------------------------|
| DESIGN CP | DRAWN BY <i>PH</i> | DART AEROSPACE USA, INC. PORT HADLOCK, WA | |
| CHECKED <i>#</i> | APPROVED <i>#</i> | DRAWING NO. D3274 | REV. D SHEET 1 OF 4 |
| DATE 06.12.19 | | TITLE SKIDTUBE ASSEMBLY | SCALE NTS |
| A | 04.03.15 | NEW ISSUE | |
| B | 04.08.09 | MOVE SADDLE HOLE: 42.14 WAS 42.76 | |
| C | 05.03.16 | ADD -043; NEW INSERTS | |
| D | 06.12.19 | NEW INSERTS, SS WEARSHOE + GASKET | |

RELEASED

07.02.12 *[Signature]*

DEO ATTACHED

| Qty -041 | Qty -043 | Part Number | Description | SHIP CODE |
|-------------|-------------|---------------|---|-------------------|
| X | | D3274-041 | SKIDTUBE ASSEMBLY | |
| | X | D3274-043 | SKIDTUBE ASSEMBLY | |
| 1 | 1 | D2600-1-240 | EXTRUSION | |
| 1 | 1 | D2646 | AFT CAP | |
| 12 | 12 | D2649 | CROSS BOLT SPACER | |
| 12 | 37 | D3275-1 | CROSS BOLT SPACER | |
| 1 | 1 | D3282-041 | FLOAT WEB | SUBJ TO COLD MNT |
| 1 | 1 | D3285-1 | CAP | |
| 1 | 1 | D3413-1 | RING | RETURN TO |
| 1 | 1 | D3415-041 | NUT PLATE | ENGINEER |
| 1 | 1 | D3535-15 | WEARSHOE | UNCONTROLLED COPY |
| 1 | 1 | D3535-23 | WEARSHOE | SUBJ TO COLD MNT |
| 1 | 1 | D3535-35 | WEARSHOE | WORK IN PROG |
| 1 | 1 | D3535-39 | WEARSHOE | |
| 1 | 1 | D3536-15 | GASKET | WORK IN PROG |
| 1 | 1 | D3536-23 | GASKET | NO. C2761-07 |
| 1 | 1 | D3536-35 | GASKET | |
| 1 | 1 | D3536-39 | GASKET | |
| 9 | 9 | D3537-1 | WEARPAD | |
| 1 | 1 | D3537-3 | WEARPAD | |
| 78 | 78 | ALS7-1032-130 | INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130) | |
| 80 | 80 | AN3C4A | BOLT | |
| 1 | 1 | AN4C5A | BOLT | |
| 1 | 1 | AN960C416 | WASHER | |
| 80 | 80 | AN960C10L | WASHER | |
| 2 | 2 | CCR264SS3-3 | RIVET | |
| 2 | 2 | CR3212-4-03 | RIVET | |
| 2 | 2 | NAS1515H3L | WASHER | |

GENERAL NOTES:

1. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
2. DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
3. ALL HOLES DRILLED ON CENTERLINES.
4. BOND D3282-041 FLOAT WEB INTO D3274-1T3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
5. WELDING TO BE DONE PER DART QSI 004.
6. FINISH: - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1
- POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
7. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3274-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX-241/-291.
8. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

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| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

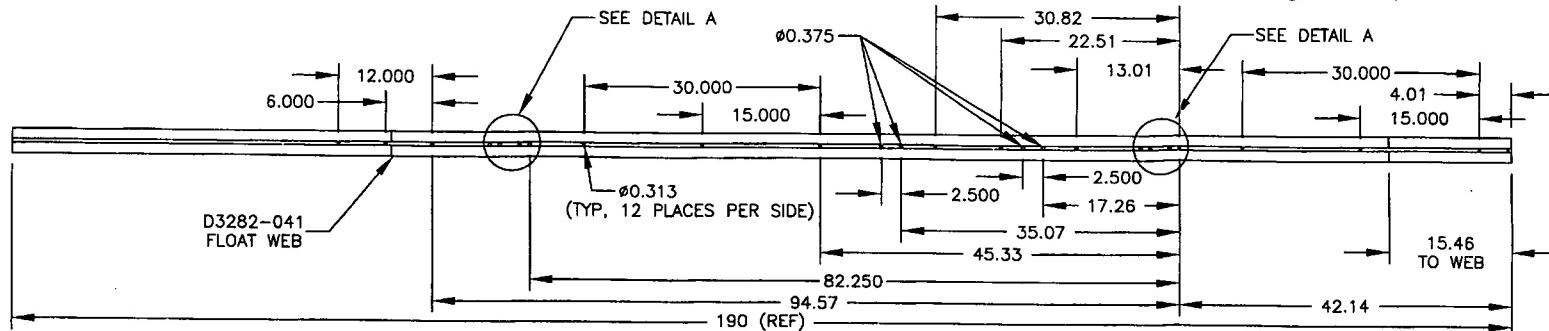
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
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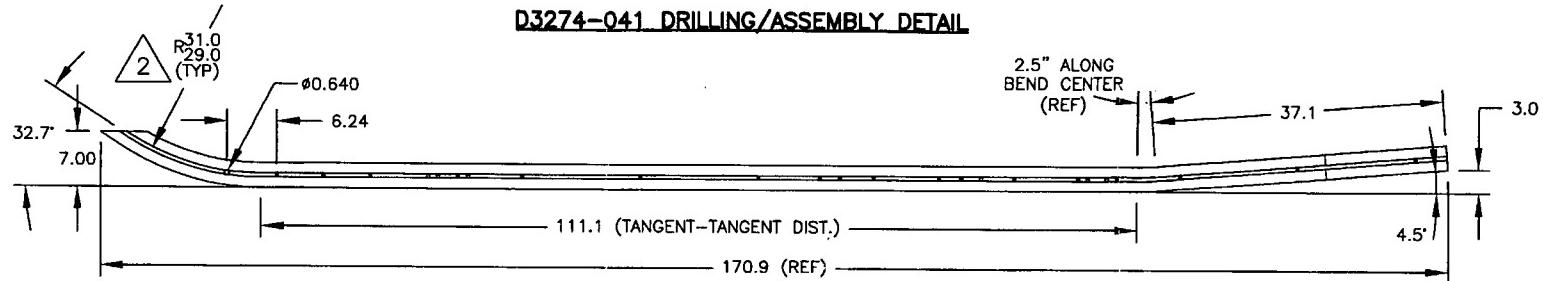
NOTE: Date & initial all entries

DEO ATTACHED

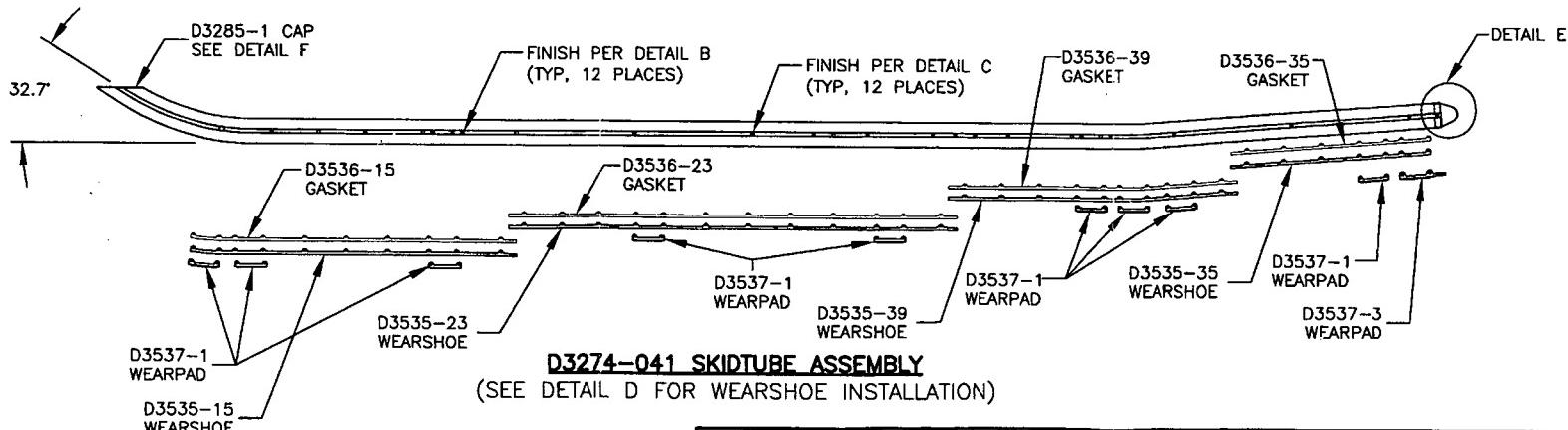
w/6 12/16/11



D3274-041 DRILLING/ASSEMBLY DETAIL



D3274-041 BEND/DRILLING DETAIL



D3274-041 SKIDTUBE ASSEMBLY
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED

07.02.12

#

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DART AEROSPACE USA, INC.

DESIGN

CP

DRAWN BY

#

DART

DART AEROSPACE USA, INC.
PORT HADLOCK, WA

REV. D

SHEET 2 OF 4

CHECKED

#

APPROVED

#

DRAWING NO.

D3274

DATE

06.12.19

TITLE

SKIDTUBE ASSEMBLY

SCALE

1:15

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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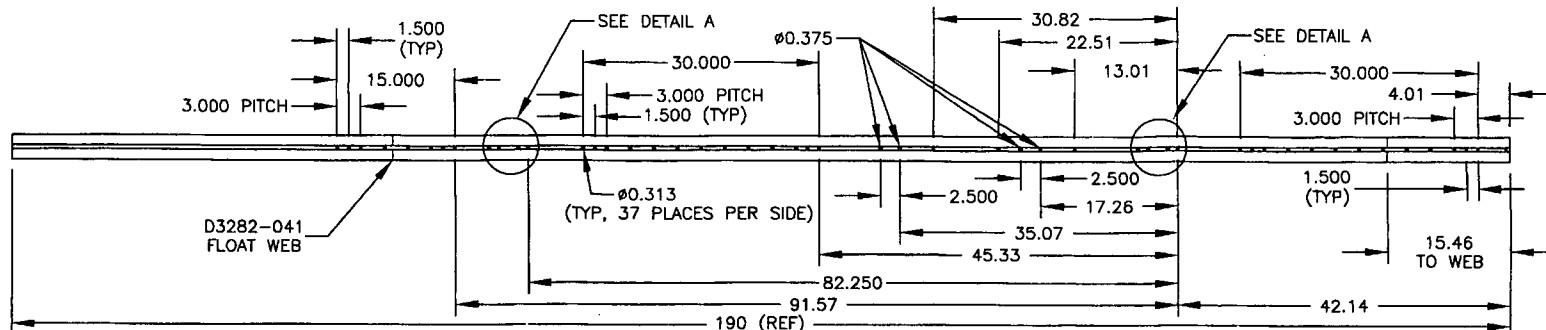
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

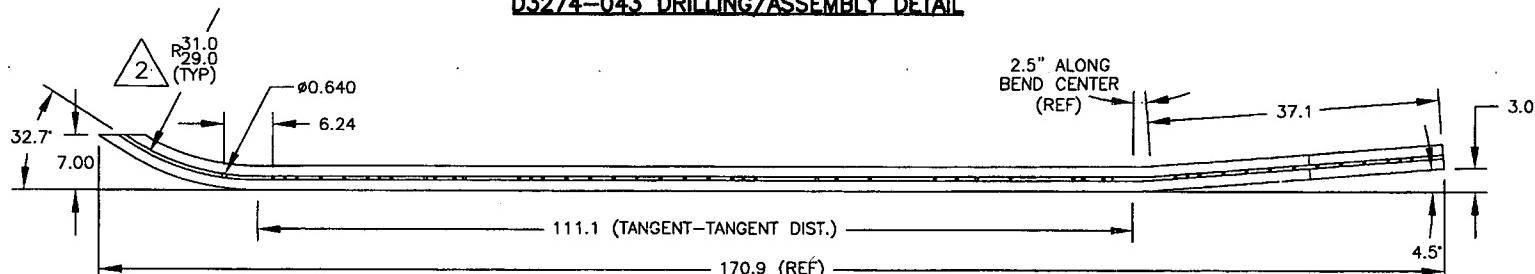
| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

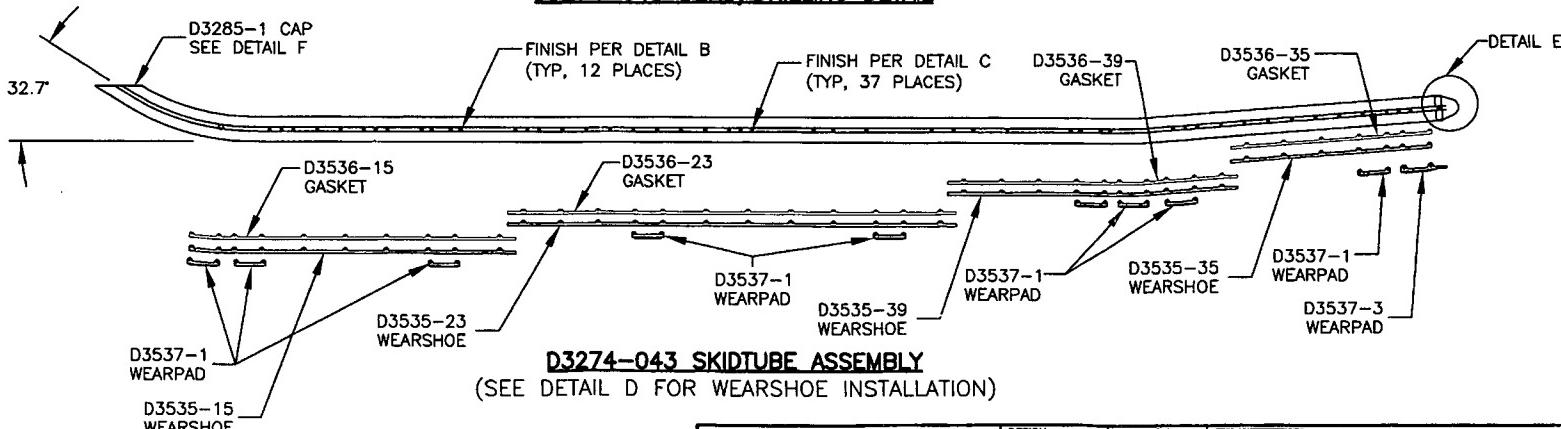
DEO ATTACHED



D3274-043 DRILLING/ASSEMBLY DETAIL



D3274-043 BEND/DRILLING DETAIL



D3274-043 SKIDTUBE ASSEMBLY
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED

07.02.12

| DESIGN | DRAWN BY | DART | DART AEROSPACE USA, INC. PORT HADLOCK, WA |
|----------|-------------------|-------------|--|
| CP | PH | | REV. D |
| CHECKED | APPROVED | DRAWING NO. | SHEET 3 OF 4 |
| | | D3274 | 1:15 |
| DATE | TITLE | | SCALE |
| 06.12.19 | SKIDTUBE ASSEMBLY | | |

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| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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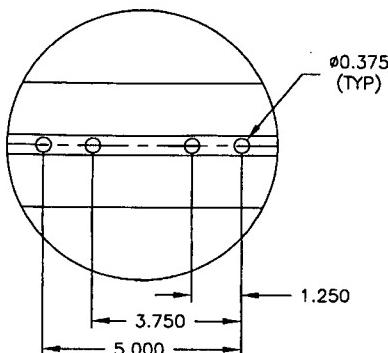
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

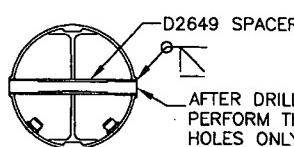
| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

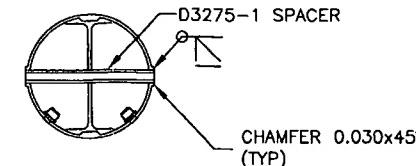
DETAIL A: DRILL DETAIL



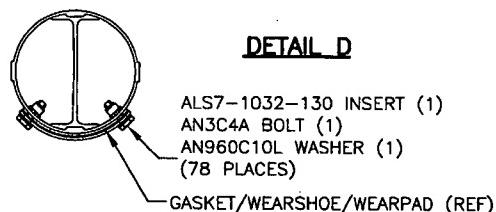
DETAIL B
FOR Ø0.375 HOLES ONLY



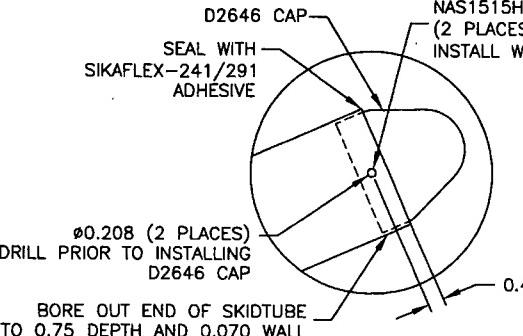
DETAIL C
FOR Ø0.313 HOLES ONLY



DETAIL D



DETAIL E AN3C4A BOLT (1)



AN4C5A BOLT (1)
AN960C416 WASHER (1)
INSTALL WITH SIKAFLEX-241/-291

CCR264SS3-3 RIVETS (2 PLACES)
INSTALL WITH LPS-3

CR3212-4-03 RIVETS (2 PLACES)
INSTALL WITH LPS-3

D3415-041 NUT PLATE,
LPS-3 ON FAYING SURFACE, LPS HARDCOAT ON EXTERIOR

D3413-1 RING

D3285-1 CAP (REF)

V1/16

1.0
REMOVE RIDGE
ON INSIDE OF
SKIDTUBE LEAVE
0.070 MIN.

ORIENTATION
OF D3415-041

DETAIL F NOTES

1. CUT TUBE LEVEL
 2. REMOVE RIDGE ON FWD SIDE
 3. LOCATE D3285-1 (TRIM AS NECESSARY)
 4. WELD D3285-1 IN PLACE PER DART QSI 004
 5. GRIND FLUSH
 6. RIVET D3415-041 NUT PLATE IN PLACE
- NOTE: MASK THREADS IN D3415-041
PRIOR TO FINISH

DET ATTACHED

RELEASED

07.02.12

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| DESIGN | DRAWN BY | DART | | DART AEROSPACE USA, INC. PORT HUDDLE, WA |
|----------|----------|------|--|---|
| CP | PH | | | DRAWING NO. D3274 |
| CHECKED | APPROVED | | | REV. 0 SHEET 4 OF 4 |
| DATE | | | | TITLE SKIDTUBE ASSEMBLY SCALE 1:3 |
| 06.12.19 | | | | |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

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|----------------------|----------------------------|-------------------------|--|-------------------------|---------------------------|--------------|
| DRAWING NO. D3274 | TITLE SKIDTUBE ASSEMBLY | REV. D | DART AEROSPACE USA, INC ENGINEERING ORDER | D.E.O. NO. D3274-D-1 | SHEET NO. SHEET 1 OF 1 | SCALE NTS |
| DRAWN <i>CP</i> | CHECKED <i>AS</i> | MFG. APPR. <i>AS</i> | APPROVED <i>MP</i> | DE APPR. <i>#</i> | | |
| DATE 09.06.17 | DATE 09.06.23 | DATE 09/06/23 | DATE 09/06/23 | DATE 09/06/23 | DATE 09.06.23 | |

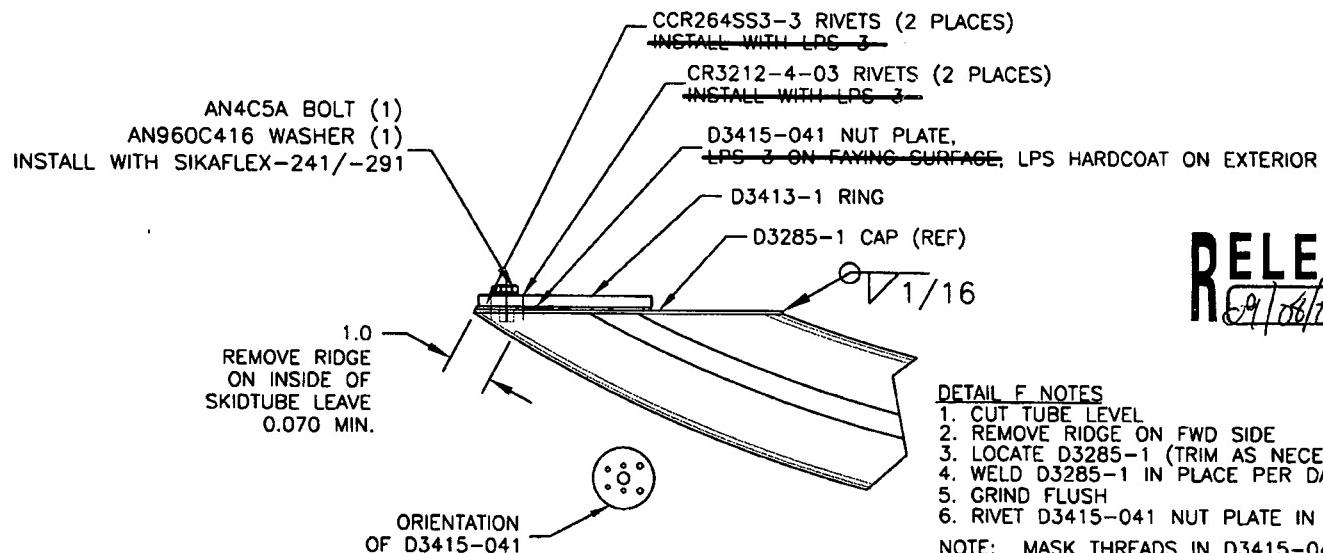
LPS-3 IS NO LONGER USED DURING ASSEMBLY OF SKIDTUBE.

AMEND NOTE 8: "~~SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES 'LPS-3' AFTER FINISH AND INSTALLATION OF INSERTS.~~
~~COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES 'LPS PROCYON' AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.~~"

AMEND DETAIL F AS SHOWN:

w/o LPS-3

DETAIL F: END FINISHING DETAIL



DETAIL F NOTES

1. CUT TUBE LEVEL
 2. REMOVE RIDGE ON FWD SIDE
 3. LOCATE D3285-1 (TRIM AS NECESSARY)
 4. WELD D3285-1 IN PLACE PER DART QSI 004
 5. GRIND FLUSH
 6. RIVET D3415-041 NUT PLATE IN PLACE
- NOTE: MASK THREADS IN D3415-041 PRIOR TO FINISH

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

NO. 241

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 622280
Part number: D206-L42-541
Description: 206 skid
Welding Process: Tig[✓] Mig[]
Base material: Aluminum
Current: AC[✓] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[✓] fail[]
Penetration: pass[✓] fail[]

UNACCEPTABLE

Cracks: pass[✓] fail[]
Undercut: pass[✓] fail[]
Pin holes: pass[✓] fail[]
Overlap (cold lap): pass[✓] fail[]
Porosity (surface): pass[✓] fail[]
Coloration: pass[✓] fail[]

Qualifier R.D. Date of Test Coupon 10.09.30

Welder Barclay Elliott Date of Test Coupon 10.09.30

The above named individual is qualified in accordance with AWS D17.1.2001 to weld.